What is claimed is:

1. A light circuit, comprising:

a first integrated optical waveguide in an optical substrate; and

a second integrated optical waveguide in the optical substrate, the first and second integrated optical waveguides crossing one another at a waveguide crossing in a crossing region of the optical substrate;

wherein one of the first and second integrated optical waveguides has an initial cross-sectional area outside the crossing region and a reduced cross-sectional area in the crossing region, the reduced cross-sectional area being smaller than the initial cross-sectional area.

2. The light circuit of claim 1, wherein the one of the first and second integrated optical waveguides has a smaller width and/or a reduced height in the crossing region than outside the crossing region.

3. The light circuit of claim 1, wherein the one of the first and second integrated optical waveguides has an initial width outside the crossing region, narrows over in the direction of the waveguide crossing in a tapering region of a first defined length in the optical substrate, and expands after the waveguide crossing in an expanding region of a second defined length in the optical substrate to the initial width again.

4. The light circuit of claim 3, wherein the one of the first and second integrated optical waveguides has a linear taper in at least one of the tapering region and the expanding region.

5. The light circuit of claim 4, wherein the linear taper of the one of the first and second integrated optical waveguides tapers in its width by an amount of 50% or less.

6. The light circuit of claim 5, wherein the linear taper of the one of the first and second integrated optical waveguides tapers in its width by an amount of 10% or more and 30% or less.

7. The light circuit of claim 6, wherein the linear taper of the one of the first and second integrated optical waveguides tapers in its width by an amount of 15%.

8. The light circuit of claim 4, wherein the linear taper of the one of the first and second integrated optical waveguides tapers from an initial width of 6 μm by about 0.5 to 3 μm, and wherein a corresponding one of the first and second defined lengths is approximately 400 μm.

9. The light circuit of claim 4, wherein the linear taper of the one of the first and second integrated optical waveguides tapers from an initial width of 6 μm by about 1 to 2 μm, and wherein a corresponding one of the first and second defined lengths is approximately 400 μm.

10. The light circuit of claim 4, wherein the linear taper of the one of the first and second integrated optical waveguides tapers from an initial width of 6 μm by about 1 μm, and wherein a corresponding one of the first and second defined lengths is approximately 400 μm.

11. The light circuit of claim 1, wherein both of the first and second integrated optical waveguides have a reduced cross section in the crossing region.

12. The light circuit of claim 1, wherein the one of the first and second integrated optical waveguides is routed locally at an increased crossing angle relative to the other of the first and second integrated optical waveguides in the crossing region.

13. The light circuit of claim 12, wherein the one of the first and second integrated optical waveguides comprises a plurality of asymmetrical linear tapers that provide a local change in a waveguide course of the one of the first and second integrated optical waveguides and increase the crossing angle.

14. The light circuit of claim 13, wherein the one of the first and second integrated optical waveguides comprises four linear tapers in the crossing region, wherein the one of the first and second integrated optical waveguides narrows in the first linear taper in the direction of the waveguide crossing, wherein the one of the first and second integrated optical waveguides expands in the second linear taper, wherein the one of the first and second integrated optical waveguides narrows in the third linear taper, wherein the one of the first and second integrated optical waveguides expands again in the fourth linear taper, and wherein the waveguide crossing occurs in a region of the second and third linear tapers.

15. The light circuit of claim 14, wherein the linear tapers individually comprise first and second opposite longitudinal sides, wherein the narrowing or tapering

of the linear tapers takes place on only one longitudinal side, while the other longitudinal side extends rectilinearly.

16. The light circuit of claim 14, wherein two rectilinear longitudinal sides of the first and second linear tapers adjoin one another, wherein two rectilinear longitudinal sides of the third and fourth linear tapers adjoin one another, and wherein the rectilinear longitudinal sides of the second and third linear tapers do not adjoin one another.

17. The light circuit of claim 1, wherein the one of the first and second integrated optical waveguides extends arcuately in the crossing region.

18. A light circuit, comprising:

a first integrated optical waveguide in an optical substrate; and

a second integrated optical waveguide in the optical substrate, the first and second integrated optical waveguides crossing one another at a waveguide crossing in a crossing region of the optical substrate;

wherein the one of the first and second integrated optical waveguides is routed locally at an increased crossing angle relative to the other of the first and second integrated optical waveguides in the crossing region.

19. The light circuit of claim 18, wherein the one of the first and second integrated optical waveguides comprises a plurality of asymmetrical linear tapers that provide a local change in a waveguide course of the one of the first and second integrated optical waveguides and increase the crossing angle.

20. The light circuit of claim 19, wherein the one of the first and second integrated optical waveguides comprises four linear tapers in the crossing region, wherein the one of the first and second integrated optical waveguides narrows in the first linear taper in the direction of the waveguide crossing, wherein the one of the first and second integrated optical waveguides expands in the second linear taper, wherein the one of the first and second integrated optical waveguides narrows in the third linear taper, wherein the one of the first and second integrated optical waveguides expands again in the fourth linear taper, and wherein the waveguide crossing occurs in a region of the second and third linear tapers.

21. The light circuit of claim 20, wherein the linear tapers individually comprise first and second opposite longitudinal sides, wherein the narrowing or tapering of the linear tapers takes place on only one longitudinal side, while the other longitudinal side extends rectilinearly.

22. The light circuit of claim 20, wherein two rectilinear longitudinal sides of the first and second linear tapers adjoin one another, wherein two rectilinear longitudinal sides of the third and fourth linear tapers adjoin one another, and wherein the rectilinear longitudinal sides of the second and third linear tapers do not adjoin one another.

23. The light circuit of claim 18, wherein the one of the first and second integrated optical waveguides extends arcuately in the crossing region.

24. The light circuit of claim 18, wherein the one of the first and second integrated optical waveguides has

an initial width outside the crossing region, narrows over in the direction of the waveguide crossing in a tapering region of a first defined length in the optical substrate, and expands after the waveguide crossing in an expanding region of a second defined length in the optical substrate to the initial width again.

25. The light circuit of claim 18, wherein the one of the first and second integrated optical waveguides extends arcuately in the crossing region.